

Attorney Docket No. AF01196

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re patent application of

Applicant: Halliyal et al.  
Serial No.: 10/731,659  
Filed: December 9, 2003  
For: IMPROVED PROCESS FOR FABRICATION OF NITRIDE LAYER WITH REDUCED HYDROGEN  
CONTENT IN ONO STRUCTURE IN SEMICONDUCTOR DEVICE  
Art Unit: 2812  
Examiner: Not yet known

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1345

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: \_\_\_\_\_  
Filing Date: \_\_\_\_\_

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) ☐ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) ☐ Attachment entitled "Concise Explanation of Relevance of Non-English Language Documents".

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a) ☐ Within 3 months of the filing date, date of entry into the National Stage, or filing date of CPA.
- (b) ☒ Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 for consideration of this Statement.
- (c) ☐ Before the mailing date of a first Office Action on the merits after a first or second submission after final rejection under 37 C.F.R. 1.129(a).

(d) \_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_ The required certification is given below, or

(2) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988

(e) \_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p), or

(2) \_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988.

4. Certification (if applicable)

(a) \_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 18-0988.

Respectfully Submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By 

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**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8**

I hereby certify that this correspondence (along with any paper referenced as being attached or enclosed) is being deposited on the below date with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 03/22/04

  
Janet Farr

Form PTO-1449 (Modified)  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  MAR 24 2004 (Use several sheets if necessary)	Atty Docket No. AF01196	Serial No. 10/731,659
	Applicant: Halliyal et al.	
	Filing Date 12/09/03	Group 2812

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	5,284,549	02/08/94	Barnes et al.	156	662	
	5,648,113	07/15/97	Barbee et al.	427	8	
	5,707,901	01/13/98	Cho et al.	438	595	
	5,840,600	11/24/98	Yamazaki et al.	438	51	
	5,872,387	02/16/99	Lyding et al.	257	607	
	5,970,384	10/19/99	Yamazaki et al.	438	795	
	6,022,799	02/08/00	Foote et al.	438	637	
	6,037,003	03/14/00	Gordon et al.	427	255.34	
	6,180,190 B1	01/30/01	Gordon	427	565	
	6,190,966 B1	02/20/01	Ngo et al.	438	257	
	6,194,784 B1	02/27/01	Parat et al.	257	774	
	6,306,777 B1	10/23/01	Ogle, Jr. et al.	438	763	
	6,319,809 B1	11/20/01	Chang et al.	438	597	
	6,319,775 B1	11/20/01	Halliyal et al.	438	261	
	6,468,599 B1	10/22/02	Terada	427	558	
	6,479,379 B2	11/12/02	Reinberg	438	635	
	2002/0068229 A1	06/06/02	Westerman et al.	430	5	

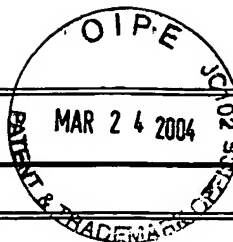
## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Sub-class	Translation	
						Yes	No

## OTHER ART

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	U.S. Patent Application Serial No. 10/731,494 filed December 9, 2003, entitled "IMPROVED PROCESS FOR FABRICATION OF SPACER LAYER WITH REDUCED HYDROGEN CONTENT IN SEMICONDUCTOR DEVICE."

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.



EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

### Information Disclosure Statement PTO-1449 (Modified)

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution.

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